Partners in Haiti

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Abstract

In this article, a group of Purdue Students describes their service-learning experience in Haiti. They highlight what they learned about Haitian culture, the country’s need for agricultural and economic sustainability, and how Purdue students contribute to meet these needs. Maggie Del Ponte is a senior in biological engineering, Rachel Stowers is a sophomore in agricultural economics, Montana Campbell and Kelli Teskey are seniors in animal sciences, and Christa Cheatham is a junior in animal sciences.

Université Anténor Firmin (UNAF)

Tucked away in the center of crowded, downtown Cap-Haïtien, Haiti lies a school called Université Anténor Firmin (UNAF), where students can receive a quality education. The partnership between UNAF and Purdue University originated about six years ago when a Purdue professor, Dr. Mark Russell, visited Cap-Haïtien and met the president and founder of the school, Gedeon Eugene. Based on this encounter, Dr. Russell created a service-learning, study abroad course to Cap-Haïtien, which currently takes about 20 students each winter break.

Eugene came from a poor family in Haiti and attended college in France, where he received master’s degrees in sociology, education, and theology. Many Haitians do not believe that they are entitled to an education, but Eugene has a passion for education and believes it is vital to the development of Haiti. From the beginning, he had a vision of constructing a university. Eugene envisions helping younger generations take on the responsibility of future development of the country, and dreams of providing work opportunities for young people in Haiti. He is dedicated to equipping them with the skills they need for success.

Poverty is a significant issue in Haiti: many people want to attend college after high school, but they cannot afford it. Most of the schools in Haiti cost about $3,000 US for one year. This is affordable for the middle class, but it creates problems for those in the lower class, which comprises approximately 80% of the population. Eugene aims to address this issue by setting tuition at $300–350 US per year, so students might one day be

Gedeon Eugene, President and Founder of UNAF. Courtesy of Bethany Weldon.
able to move into a higher socioeconomic class. Currently, many students go elsewhere for their education, such as the Dominican Republic. These students often do not return to Haiti.

Eugene opened his dream university in 2007. He began with eight professors and 140 students. Only 80 students finished school the first year. Today there are 160 professors and over 2,600 students. Instructors are selected through a review of their resume. Full-time instructors must teach 10 hours per week, which allows them to teach elsewhere as well. Many professors earned their master’s degrees from universities in Canada, France, or the United States. There are also some teachers who have earned their doctorates from universities in Chile and Columbia.

After the earthquake in January of 2010, the structural integrity of the buildings in Haiti were in question. As a result, Eugene purchased a unit of land for a new building, designed by engineers and architects, and built by a team of workers. UNAF is the only university in the center of Cap-Haïtien that owns its own building.

UNAF now offers several degrees. Students can obtain their Bachelor of Science degrees in education, business, computer science, or nursing. UNAF also offers five-year Bachelor of Science degrees in agricultural science and engineering. Many parents still prefer to send their children to the Dominican Republic or to Port Au Prince for medical science degrees. Therefore, Eugene decided to invest in a medical school and began construction at another site in Cap-Haïtien. This school will be focused on health sciences, including nursing, laboratory school, and clinical psychology. There will be buildings for both students and instructors to live in, as well as administration and laboratory buildings. He has finished construction on a UNAF chemistry lab and is currently developing a food technology lab—both partner projects between Purdue and UNAF. The chemistry lab is taught by Professor Jodbelem Chery, who is passionate about helping students learn. The lab has been running for about two years, primarily serving the students in agricultural science. Our team approach at Purdue is to understand and help achieve Eugene’s goals. This entails reaching out to experts at Purdue and the surrounding area, conducting research, and developing designs for the classroom in order to provide him with multiple options to move forward.

**Fruit Processing**

The lab originated with Eugene’s idea about food processing, as Haiti has many different fruits that they have been unable to transform. Fruit products such as juice, jam, and powdered juice are generally imported, but they could be processed locally. This lab is still in the design phase, but the classroom has been selected and the money is committed. Dr. Russel’s service-learning class is currently designing the lab layout, bench design, protocols for producing juice (mango, pineapple, and orange), and a food science curriculum. The professor for this lab will be Mr. Chery, as he is dedicated to becoming an expert in food and water safety. The Cap-Haïtien community will benefit from this lab, which ensures that their food is safe.

**Lakou Lakay**

Approximately 20 years ago, a gentleman named Mr. Etienne opened his home to the public as a hotel and cultural center, called Lakou Lakay, which means “our home” in Creole. Etienne was concerned that Haiti’s younger generations are not preserving the culture, so his goal was to teach people about the culture and keep it alive. Visitors are able to enjoy traditional Haitian music and meals including yucca root, meatballs, plantains, conch, rice, and assorted vegetables. There is a potential partnership with Mr. Etienne because he is interested in processing the fruits of Haiti, and Purdue students can help him do that.

**University Partnerships and the Symposium**

The UNAF and Purdue partnership is anchored on a three-day symposium at UNAF that takes place during our study abroad trip over winter break. Students from
other universities also attend. The symposium consists of lectures and demonstrations for each of our projects. The goal of our presentations is to equip them with new, applicable knowledge and skills. The topics for the 2016 symposium included animal management, soil science, food technology, food science, water filtration, and biodigesters. Eugene believes that the symposium helps stimulate new interests and methodologies among his students.

Centro de Técnologia e Educação a Distância (CTEAD) is another university in Haiti that seeks to educate adults about better agricultural practices, including irrigation and simple soil analyses that help to determine the best places to grow crops. In November 2015, another university called Université Républicaine d’Haiti (URH) was founded. URH is a comprehensive, independent university that delivers challenging, high-quality educational experiences to a diverse group of learners. CTEAD and URH have partnered together, and Purdue students visited their research farm. On this farm, they grow many crops including lettuce, sugarcane, corn, peppers, and cabbage. They use several irrigation methods for experimental purposes, and techniques such as grafting, to produce better crops. They also have an experimental greenhouse on their property.

Jean Claude Pierre-Louis was our contact from CTEAD throughout the trip. We learned beside the Haitian students, and we realized they aren’t much different from us when it comes to taking charge of our education and future. We all asked questions throughout the day and worked together to create irrigation ruts in the earth. Several of their students also attended our symposium to learn about poultry, food safety, food technology, and water filtration.

**Heifer International**

While in Haiti, we visited the Heifer International Headquarters, whose vision is to teach Haitians how to properly filter and sanitize water for drinking and cooking. They currently use a chemical to purify the water. Their goal is to eliminate poverty through the use of breeding and selling livestock within villages.

**Meds and Food for Kids**

Meds and Food for Kids (MFK) is a nonprofit organization founded by pediatrician Patricia Wolff. Dr. Wolff witnessed the effects of malnutrition on infants and young children during her experience with Doctors Without Borders and has made it her mission to eliminate malnutrition within Haiti and beyond. After learning about ready-to-use therapeutic food (RUTF) used in similar settings, she founded MFK in Cap-Haïtien; MFK’s product is called “Medika Mamba,” or “peanut butter medicine.” The processing center for the peanut butter is relatively small scale; sacks of labeled peanut bags are stacked across MFK’s facility. MFK partners with local Haitian farmers in addition to receiving peanut imports. Peanuts are tested for aflatoxins to ensure that the end product meets proper standards. A variety of bags are used to store the peanuts, including Purdue Improved Cowpea Storage (PICS) bags to help protect against mold, fungi, and parasites.
MFK’s goal is to train Haitians on how to operate such a facility so that they can adopt similar production plans for other crops. Behind the facility there are research and demonstration plots dedicated to sorghum where MFK grows different varieties and investigates best practices for use in the development of sorghum-based snacks. The system of growing sorghum in Haiti needs improvement. We visited two plots that were filled with sorghum—one was a robust, healthy plot, and the other was a stunt-ed, almost dead plot. This showed us how genetic variety adaptations to climate compare to traditional Haitian farming methods: without irrigation/watering, fertilizer, or pesticides. The rest of the land is filled with organized, irrigated peanut plants. A few rows of peanut plants appear more robust—this is because they are native to Haiti. The native strain is naturally drought resistant and produces mass quantities of peanuts in comparison to the American strains, also grown by MFK. However, the size of the Haitian peanut is incredibly small compared to the American variety. It is MFK’s hope that a hybrid can be created in the near future.

It can be hard to imagine how a simple food such as peanut butter could be considered a medicine, but to the children suffering from malnutrition, Medika mamba is nothing short of miracle peanut butter. Inside the business offices of MFK, pictures of malnourished Haitian infants with potbellies and red hair stare back at passersby. Next to them, a healthy infant stares back—the same child after three weeks of Medika mamba. The nutritionist at MFK monitors the growth of the children receiving treatment, and is able to tell when the children haven’t taken the product. Why wouldn’t the parents of a malnourished child feed them a product that saves their life? “It’s a cultural barrier,” Dr. Wolff explained. “Mothers have a hard time accepting something new, since their mothers fed them rice growing up and they’re fine. Mixing in this product with the meal is untraditional. Sometimes mothers will sell the product to buy a bag of rice instead.” MFK works closely with the families to improve the culture and the health of the child.

Currently, three different peanut butter products are produced by MFK: one for infants, one for toddlers, and one for school children. Essential nutrients are added to the peanut butter packets. Who says medicine has to taste bad? The toddler version tastes like a peanut butter cracker. It is Dr. Wolff’s dream that Haitian farmers and residents will learn to grow and distribute sustainable products, eliminating the need for MFK.

The trip to Haiti was an exciting opportunity to develop existing partnerships and form new relationships. We aimed to immerse ourselves in their culture in order to better understand the people we are trying to serve. As a result, we learned how to communicate across cultures, work with each other, and think creatively.

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